

## REMARKS

Claims 2 to 17 are pending.

Claim 1 is cancelled. Claims 2, 3, 6, 13, and 17 are amended.

### Drawings:

Fig. 3 is voluntarily amended to correct a clerical error. The line pointing to element 110 (an array of MEMS acoustic transducers) erroneously points to an angled launched acoustic wave rather than to the array of MEMS acoustic transducers. An appropriate correction of Fig. 3 is carried out and a copy of the Fig. 3 showing the change in red is submitted with this response for review by the Examiner. No new matter is introduced into the figures by way of this amendment.

### Allowable Subject Matter:

Claims 3 to 14 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including the limitations of the base claim and intervening claims.

### Claim Rejections - 35 U.S.C. § 103:

Claims 1-2 and 15-17 are rejected under 35 USC § 103 (a) as being obvious in view of Ueha et al. (Ultrasonics Symposium 10/1998. Proceedings. pp. 661-666 Vol. 1) having further regard to APA.

Claim 1 is cancelled without prejudice.

Claim 3 is amended to incorporate the limitations of claim 1. It is submitted, that amended claim 3 is allowable as indicated in the Office Action under the heading of "Allowable Subject Mater".

Claim 2 defines that the moveable element comprises a planar surface. This feature is an embodiment of the present invention and optional. Hence, claim 2 is amended to be dependent from amended claim 3.

Claim 6 is amended to change its dependency to be dependent from claim 2.

Claim 13 is amended to correct a typographical error.

It is believed that claims 15 and 16 are allowable as they are dependent from amended claim 3 which is believed to be allowable.

Claim 17 is amended to overcome the obviousness rejection in view of Ueha et al. and APA. Amended claim 17 defines two additional steps, viz. “providing a substrate comprising a cavity; and providing an acoustic wave generator in said cavity” in order to align it with allowable claim 3. As it was stated in the Official Office Action mailed on Sep. 11, 2002, the feature of the claims wherein the substrate comprises a cavity for accommodating the acoustic wave generator was found to be allowable. Applicant respectfully submits that amended claim 17 overcomes the obviousness rejection in view of the amendments of claim 17.

No new matter has been introduced by way of these amendments.

Applicant kindly requests reconsideration of this application.

As this response has been timely filed within the set period of responses, no petition for extension of time or associated fee is required. However, the Commissioner is hereby authorized to charge any deficiencies in the fees provided, or credit any overpayment to Deposit Account No: 50-1465.

Furthermore, Applicant notes that the mailing address of record is not current and an appropriate correction is required. The new mailing address to which any further correspondence should be addressed is:

**JDS Uniphase Corporation  
Intellectual Property Dept.  
3000 Merivale Road  
Ottawa, Ontario, Canada  
K2G 6N7**

Respectfully submitted,



---

Neil Teitelbaum  
Registration No: 38,793

**Customer No: 24949**

c/o Neil Teitelbaum  
Vice President, Intellectual Property  
JDS Uniphase Corporation  
Intellectual Property Dept.  
3000 Merivale Road  
Ottawa, Ontario  
Canada K2G 6N7

Tel.: 613-843-3000 ext. 2690  
Fax: 613-823-9957  
Email: neil.teitelbaum@jdsu.com

KBB/ewg

## APPENDIX A

### Marked-Up Version of Amended Paragraphs and Claims (37 C.F.R. § 1.121)

IN THE CLAIMS:

*Claim 1 is cancelled:*

*Claim 2 is amended as indicated below:*

2. (Once amended) The MEMS acoustic actuator as defined in claim ~~3~~1 wherein the moveable element comprises a planar surface for receiving and deflecting the acoustic wave.

*Claim 3 is amended as indicated below:*

3. (Once amended) ~~The~~A MEMS acoustic actuator as ~~defined in claim 2~~  
~~wherein comprising:~~

an acoustic wave generator for generating an acoustic wave;  
a ~~the~~ substrate comprises comprising a cavity for accommodating the acoustic wave generator and for directing the acoustic wave to the planar surface.; and  
a moveable element for receiving the acoustic wave, said moveable element being operatively connected to the acoustic wave generator such that the acoustic wave exerts sufficient acoustic radiation pressure for moving said moveable element.

*Claim 6 is amended as indicated below:*

6. (Once amended) The MEMS acoustic actuator as defined in claim ~~3~~2 further comprising fastening means for moveably attaching the moveable element to the substrate.

*Claim 13 is amended as indicated below:*

13. (Once amended) The MEMS acoustic actuator as defined in claim 2 comprising at least 3 acoustic wave generators for providing movement of the moveable element in two axes.

*Claim 17 is amended as indicated below:*

17. (Once amended) A method of actuating a MEMS device comprising the steps of:  
    providing a substrate comprising a cavity;  
    providing an acoustic wave generator in said cavity;  
    launching an acoustic wave; and  
    receiving the acoustic wave with a moveable element such that the acoustic wave exerts sufficient radiation pressure for moving said moveable element.

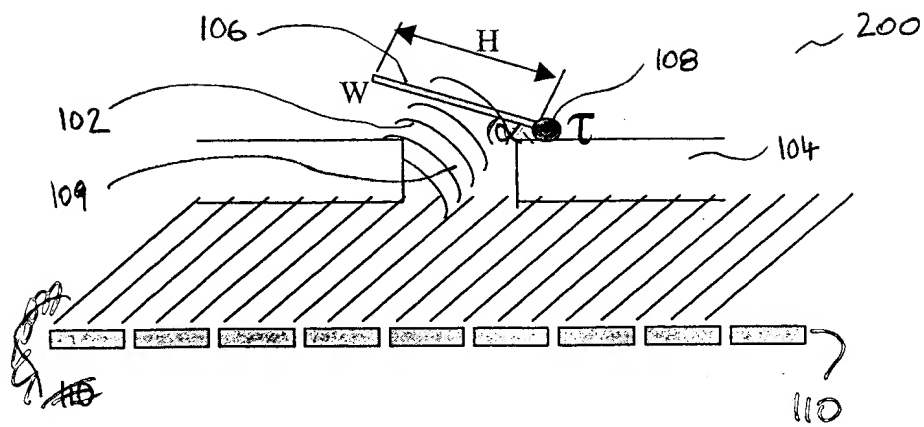


Fig. 3

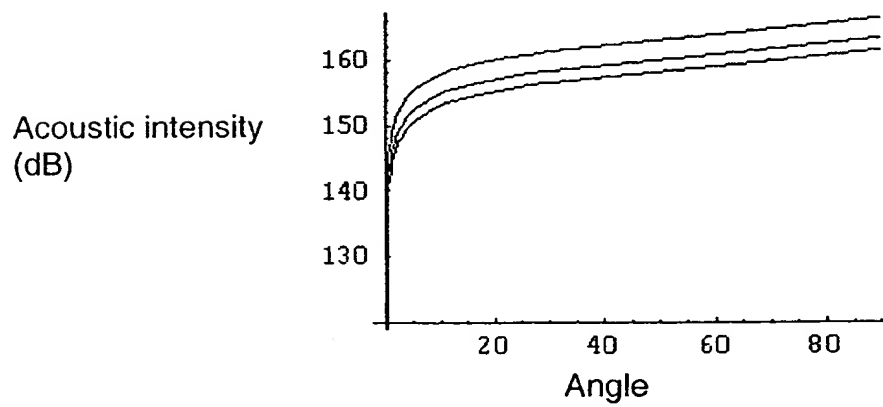


Fig. 4